

1. A body fluid collecting device including a sensor to detect a prescribed component in the body fluid, wherein said sensor includes at its distal end a measuring part capable of holding said body fluid, and said body fluid collecting device includes a first supporter to support the vicinity of said measuring part of said sensor and a second supporter to support said sensor at a place closer to the proximal end than said first supporter, and also includes means to prevent said body fluid from infiltrating into other parts than said measuring part.

2. The body fluid collecting device as defined in Claim 1, wherein said first supporter is arranged closer to the central axis of said body fluid collecting device than said second supporter.

3. The body fluid collecting device as defined in Claim 1, which further includes a body fluid duct which communicates with said first supporter and introduces said body fluid into said measuring part.

4. The body fluid collecting device as defined in Claim 1, wherein said sensor electrically detects the prescribed component in the body fluid by contact with said body fluid.

5. A body fluid collecting device including a sensor to detect a prescribed component in the body fluid, wherein said sensor includes at its distal end a measuring part capable of holding said body fluid, and said body fluid collecting device includes a first supporter to support the vicinity of said measuring part of said sensor and a second supporter to support said sensor at a place closer to the proximal end than said first supporter, with said first and second supporters forming between them a non-contact space in which the surface of said sensor does not substantially come into contact with the inside of said body fluid collecting device.

6. The body fluid collecting device as defined in Claim 5, wherein said first supporter has at its proximal end a concave that communicates with said non-contact space.

7. The body fluid collecting device as defined in Claim 6, wherein said concave is a notch formed by cutting

BEST AVAILABLE COPY

part of said first supporter.

8. The body fluid collecting device as defined in Claim 5, wherein said sensor is bent or curved in said non-contact space.

9. The body fluid collecting device as defined in Claim 5, wherein said first supporter is arranged closer to the central axis of said body fluid collecting device than said second supporter.

10. The body fluid collecting device as defined in Claim 5, which further includes a body fluid duct which communicates with said first supporter and introduces said body fluid into said measuring part.

11. The body fluid collecting device as defined in Claim 10, wherein said body fluid duct has a volume which is 0.5 to 2 times the volume of said measuring part.

12. The body fluid collecting device as defined in Claim 10, wherein said body fluid duct is 0.1 to 10 mm in length and 0.1 to 3 mm in inside diameter.

BEST AVAILABLE COPY

13. The body fluid collecting device as defined in Claim 10, wherein said measuring part is inclined with respect to the lengthwise direction of said body fluid duct and is positioned in the vicinity of the outlet opening of said body fluid duct.

14. The body fluid collecting device as defined in Claim 10, which further includes a guide that projects from the distal end of said body fluid collecting device and introduces said body fluid into the inlet opening of said body fluid duct,

~~said guide being formed such that the distance from the distal end thereof to the inlet opening of said body fluid duct is 1 to 10 mm.~~

15. The body fluid collecting device as defined in Claim 5, wherein said sensor electrically detects the prescribed component in the body fluid by contact with said body fluid.

16. A body fluid collecting device of the type integral with a sticking needle, comprising:
a needle accommodating part provided with a sticking needle which sticks the skin to bleed body fluid,

BEST AVAILABLE COPY

a sensor to detect prescribed components in said body fluid, and

a sensor holder which is mounted on the distal end of said needle accommodating part, and which supports said sensor between said needle accommodating part and said sensor holder.

17. The body fluid collecting device of the type integral with a sticking needle as defined in Claim 16, wherein said sensor includes its distal end side curved or inclined toward the central axis of said sticking needle.

18. The body fluid collecting device of the type integral with a sticking needle as defined in Claim 16, wherein said sensor includes its proximal end side held between said needle accommodating part and said sensor holder.

19. The body fluid collecting device of the type integral with a sticking needle as defined in Claim 16, wherein said sensor is capable of holding said body fluid in its distal end and is provided with a measuring part to determine said prescribed components.

20. The body fluid collecting device of the type integral with a sticking needle as defined in Claim 19, wherein said sensor holder includes a body fluid duct which introduces said body fluid into said measuring part.

21. The body fluid collecting device of the type integral with a sticking needle as defined in Claim 20, wherein said measuring part is inclined with respect to the lengthwise direction of said body fluid duct and is positioned in the vicinity of the outlet opening of said body fluid duct.

22. The body fluid collecting device of the type integral with a sticking needle as defined in Claim 20, wherein said sensor holder includes a guide that projects from the distal end thereof and introduces said body fluid into the inlet opening of said body fluid duct, so that said sticking needle sticks into the skin while the distal end of said guide is in contact with the skin.

23. The body fluid collecting device of the type integral with a sticking needle as defined in Claim 16, wherein said sensor holder is fixed by fitting to said needle accommodating part.

24. The body fluid collecting device of the type integral with a sticking needle as defined in Claim 16, which further includes means to position said sensor holder with respect to the lengthwise direction of said needle accommodating part.

25. The body fluid collecting device of the type integral with a sticking needle as defined in Claim 24, wherein said positioning means is a step that is formed on the outside midway in the lengthwise direction of said needle accommodating part such that the proximal end of said sensor holder comes into contact with it.

26. The body fluid collecting device of the type integral with a sticking needle as defined in Claim 16, wherein said sensor holder has at least the distal end thereof made substantially transparent.

27. The body fluid collecting device of the type integral with a sticking needle as defined in Claim 16, which is assembled after said needle accommodating part has undergone sterilization in such a state that its opening is sealed with a membrane, said opening being formed at the

distal end of said needle accommodating part such that said sticking needle can pass through it.

28. The body fluid collecting device of the type integral with a sticking needle as defined in Claim 27, wherein said needle accommodating part keeps its inside sterilized until the time of use.

29. The body fluid collecting device of the type integral with a sticking needle as defined in Claim 16, which assumes approximately a rectangular solid in its entire shape.

30. The body fluid collecting device of the type integral with a sticking needle as defined in Claim 16, wherein said sensor electrically detects the prescribed component in the body fluid by contact with said body fluid.

BEST AVAILABLE COPY